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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,843	10/18/2007	Tomoaki Hoshino	KUP-12	3086

20808 7590 02/24/2010

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EXAMINER	
SEHARASEYON, JEGATHEESAN	
ART UNIT	PAPER NUMBER
1646	

NOTIFICATION DATE	DELIVERY MODE
02/24/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/591,843	HOSHINO ET AL.	
	Examiner	Art Unit	
	JEGATHEESAN SEHARASEYON	1646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *6/25/08*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-6* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1 (in part), 2 (in part), drawn to a protease inhibitor comprising a redox activity protein.

Group II, claim(s) 1 (in part), 2 (in part), drawn to a protease inhibitor comprising a protein with a similar activity to said redox activity protein.

Group III, claim(s) 1 (in part), 2 (in part), drawn to a protease inhibitor comprising a gene that encodes redox activity protein.

Group IV, claim(s) 1 (in part), 2 (in part), drawn to a protease inhibitor comprising a gene that encodes the protein with a similar activity to said redox activity protein.

Group V, claim(s) 3 (in part), drawn to a preventive or therapeutic agent for chronic obstructive pulmonary disease comprising a redox activity protein.

Group VI, claim(s) 3 (in part), drawn to a preventive or therapeutic agent for chronic obstructive pulmonary disease comprising a protein with a similar activity to said redox activity protein.

Group VII, claim(s) 3 (in part), drawn to a preventive or therapeutic agent for chronic obstructive pulmonary disease comprising a gene that encodes redox activity protein.

Group VIII, claim(s) 3 (in part), drawn to a preventive or therapeutic agent for chronic obstructive pulmonary disease comprising a gene that encodes a protein with a similar activity to said redox activity protein.

Group IX, claim(s) 3 (in part), drawn to a preventive or therapeutic agent for immunodeficiency syndrome comprising a redox activity protein.

Group X, claim(s) 3 (in part), drawn to a preventive or therapeutic agent for immunodeficiency syndrome comprising a protein with a similar activity to said redox activity protein.

Group XI, claim(s) 3 (in part), drawn to a preventive or therapeutic agent for immunodeficiency syndrome comprising a gene that encodes redox activity protein.

Group XII, claim(s) 3 (in part), drawn to a preventive or therapeutic agent for immunodeficiency syndrome comprising a gene that encodes a protein with a similar activity to said redox activity protein.

Group XIII, claim(s) 4 (in part), drawn to a preventive or therapeutic agent for chronic obstructive pulmonary disease comprising an interleukin-18 inhibitor protein.

Group XIV, claim(s) 4 (in part), drawn to a preventive or therapeutic agent for chronic obstructive pulmonary disease comprising a protein with an activity of inhibiting interlekin-18.

Group XV, claim(s) 4 (in part), drawn to a preventive or therapeutic agent for chronic obstructive pulmonary disease comprising a gene that encodes an interleukin-18 inhibitor protein.

Group XVI, claim(s) 4 (in part), drawn to a preventive or therapeutic agent for chronic obstructive pulmonary disease comprising a gene that encodes a protein with an activity of inhibiting interlekin-18

Group XVII, claim(s) 5 (in part), drawn to a preventive or therapeutic agent for pulmonary alveolar proteinosis comprising an interleukin-18 inhibitor protein.

Group XVIII, claim(s) 5 (in part), drawn to a preventive or therapeutic agent for pulmonary alveolar proteinosis comprising a protein with an activity of inhibiting interlekin-18.

Group XIX, claim(s) 5(in part), drawn to a preventive or therapeutic agent for pulmonary alveolar proteinosis comprising a gene that encodes an interleukin-18 inhibitor protein.

Group XX claim(s) 5 (in part), drawn to a preventive or therapeutic agent for pulmonary alveolar proteinosis comprising a gene that encodes a protein with an activity of inhibiting interlekin-18

Group XXI, claim(s) 6 (in part), drawn to a preventive or therapeutic agent for cardiovascular disease comprising an interleukin-18 inhibitor protein.

Group XXII, claim(s) 6 (in part), drawn to a preventive or therapeutic agent for cardiovascular disease comprising a protein with an activity of inhibiting interlekin-18.

Group XXIII, claim(s) 6 (in part), drawn to a preventive or therapeutic agent for cardiovascular disease comprising a gene that encodes an interleukin-18 inhibitor protein.

Group XXIV claim(s) 6 (in part), drawn to a preventive or therapeutic agent for cardiovascular disease comprising a gene that encodes a protein with an activity of inhibiting interlekin-18

2. The inventions listed as Groups I-XXIV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Claim 1 lacks unity of invention as being anticipated by Ueda et al., (J. Immunol. (1998) Vol. 161, No.12 pp6689-6695). Ueda et al. teaches that thioredoxin is an inhibitor of caspase-3. Because claim 1 is anticipated by the art (Ueda et al., the remaining claims lack the same or corresponding special technical feature and as such, lack unity. The expression “special technical features” means those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art. The requirement of unity of invention shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features.

3. Applicant is advised that if any of Groups I-IV are elected, a further election of a protease will be required in order for the election to be fully responsive

4. The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

7. In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not

commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder**. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEGATHEESAN SEHARASEYON whose telephone number is (571)272-0892. The examiner can normally be reached on M-F: 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary B. Nickol, Ph. D can be reached on 571-272-0835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jegatheesan Seharaseyon,/
Examiner, Art Unit 1646

JS
2/15/10